## QC ABSTRACT

**NAME OF WORK:** Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division

| SL NO | Item Of Work | Name of Test | Frequency of Test/Quantity | Executed Quantity | Number of Tests Required | Number of Tests Conducted |
|---|---|---|---|---|---|---|
| | | **Materials** | | | | |
| 1 | Cement | Fineness by dry sieving | One Test | | 1 | 1 |
| | | Finess by Air permeablity method | One Test | | 1 | 1 |
| | | Density | One Test | | 1 | 1 |
| | | Standard Consistency | One Test | | 1 | 1 |
| | | Initial Setting time | One Test | | 1 | 1 |
| | | Final Setting time | One Test | | 1 | 1 |
| | | Soundness (Le Chatelier's Method) | One Test | | 1 | 1 |
| | | Compressive Strength | One Test | | 1 | 1 |
| 2 | Coarse aggregate(40 mm down size) | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Flakiness Index | One Test | | 1 | 1 |
| | | Elongation Index | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Bulk Density(Loose) | One Test | | 1 | 1 |
| | | Bulk Density(Compacted) | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| 3 | Coarse aggregate(20 mm down size) | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Flakiness Index | One Test | | 1 | 1 |
| | | Elongation Index | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Bulk Density(Loose) | One Test | | 1 | 1 |
| | | Bulk Density(Compacted) | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| | | Aggregate crushing Value | One Test | | 1 | 1 |
| | | Aggregate Impact Value | One Test | | 1 | 1 |
| 4 | Fine aggregate | SIEVE ANALYSIS | One Test | | 1 | 1 |
| | | Water Absorption | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Material finer than 75 micron | One Test | | 1 | 1 |
| 5 | Steel | Bend test | One Test | | 1 | 1 |
| | | Tensile Test | One Test | | 1 | 1 |
| | | Yield Test | One Test | | 1 | 1 |
| | | ReBend test | One Test | | 1 | 1 |
| 6 | Brick | Compressive Strength | One Test | | 1 | 1 |
| | | WATER ABSORPTION | One Test | | 1 | 1 |
| | | EFFLORESCENCE | One Test | | 1 | 1 |
| | | DIMENSIONS AND TOLERANCES | One Test | | 1 | 1 |
| 7 | RCC(M25) | Compressive Strength(7days and 28days) | 1 set /1-5 cum | 4.96 | 2 | 2 |
| 8 | RCC(M20) | Compressive Strength(7days and 28days) | 5 set /6-15 cum | 15.62 | 10 | 10 |
| 9 | Mortar Sand | Water Absorption | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Material finer than 75 micron | One Test | | 1 | 1 |
| | | Compacted Bulk Density | One Test | | 1 | 1 |
| | | Loose Bulk Density | One Test | | 1 | 1 |
| | | SIEVE ANALYSIS | One Test | | 1 | 1 |
| 10 | Plaster Sand | Water Absorption | One Test | | 1 | 1 |
| | | Specific Gravity | One Test | | 1 | 1 |
| | | Material finer than 75 micron | One Test | | 1 | 1 |
| | | SIEVE ANALYSIS | One Test | | 1 | 1 |

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## TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Date: 19-06-20

| | | |
|---|---|---|
| **Lab ID** | : | CP-2020-12-12-31 |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 16-06-20 |
| **Sample Type** | : | Birla Super 53grade |
| **Reference to BIS codes** | : | IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,<br>IS 4031 (Part 1,2 3,4,5, 6,11):1988<br>IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4<br>IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5<br>IS 4031 Part 3, Determination of Soundness, Clause 5,Clause 6<br>IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5<br>IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5<br>IS 4031 Part 11,DETERMINATION OF DENSITY , Clause 6 |
| **Date of test** | : | 17-06-20 |
| **Environmental Conditions during test** | : | Temperature: 26°C<br>Humidity: 72% |

| Sl.No. | Physical properties | Results | Requirement as per IS 12269: 2013 |
|---|---|---|---|
| 1 | Fineness by dry sieving (%) | 2.53 | – |
| 2 | Finess by Air permeablity method ($m^2$/kg,Min) | 287.5 | 225$m^2$/kg, Min |
| 3 | Density (gm/cc) | 3.12 | – |
| 4 | Standard Consistency (%) | 28.5% | Not specified |
| 5 | Initial Setting time | 155 minutes | Not less than 30 minutes |
| 6 | Final Setting time | 260 minutes | Not more than 600 minutes |
| 7 | Soundness (Le Chatelier's Method) | 2mm | Not more than 10 mm |

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* The results obtained are satisfactory as per standard requirements.

**Note:**

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

Any correction in the report will make this report invalid

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R KARTHIK RECHAN
Authorized Signatory
Quality Manager

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## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-12-31** **Date: 19-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample condition** | : | Satisfactory |
| **Date of Receipt** | : | 16-06-20 |
| **Sample Type** | : | 40mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 16-06-20 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 40MM DOWN COARSE AGGREGATE:**

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**Total weight taken** : **15000 grams**

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| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 80 mm | 0 | 0 | 0.0 | 100 | 100 |
| 2 | 40 mm | 318 | 318 | 2.1 | 97.9 | 90-100 |
| 3 | 20 mm | 7441 | 7759 | 51.7 | 48.3 | 30-70 |
| 4 | 10 mm | 5152 | 12911 | 86.1 | 13.9 | 10-35 |
| 5 | 4.75 mm | 1711 | 14622 | 97.5 | 2.5 | 0-5 |
| 6 | Pan | 378 | 15000 | 100.0 | 0 | --- |

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## TEST REPORT ON COARSE AGGREGATES

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-12-31** **Date: 18-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 16-06-20 |
| **Sample Type/ Size** | : | 20mm down size coarse aggregate |
| **Reference to BIS codes** | : | IS: 383:2016 (Specification for Coarse and fine Aggregates )<br>IS: 2386 :1963(Part - 1,3,4) RA2011<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption<br>IS 2386 Part 4: Mechanical Properties |
| **Date of test** | : | 16-06-20 |

**SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:**

**Total weight taken** : 5000 **grams**

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|---|---|---|---|---|---|---|
| 1 | 40 mm | 0 | 0 | 0 | 100 | 100 |
| 2 | 20 mm | 255 | 255 | 5.1 | 94.9 | 90-100 |
| 3 | 10 mm | 2789 | 3044 | 60.9 | 39.1 | 25-55 |
| 4 | 4.75 mm | 1545 | 4589 | 91.8 | 8.2 | 0-10 |
| 5 | Pan | 411 | 5000 | 100 | 0 | – |

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# TEST REPORT OF FINE AGGREGATE

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-12-31** **Date: 18-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 16-06-20 |
| **Sample Type** | : | Fine Aggregate |
| **Reference to BIS codes** | : | IS 383 : 2016 (Specification for Coarse and fine Aggregates)<br>IS: 2386 :1963(Part - 1, 3) RA2012<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption |
| **Date of test** | : | 16-06-20 |
| **Total weight taken** | : | 1000 grams |

| Sl.no | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS 383:2016 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Grading Zone I | Grading Zone II | Grading Zone III | Grading Zone IV |
| 1 | 10 mm | 0 | 0 | 0.0 | 100.0 | 100 | 100 | 100 | 100 |
| 2 | 4.75 mm | 27 | 27 | 2.7 | 97.3 | 90-100 | 90-100 | 90-100 | 95-100 |
| 3 | 2.36 mm | 55 | 82 | 8.2 | 91.8 | 60-95 | 75-100 | 85-100 | 95-100 |
| 4 | 1.18 mm | 239 | 321 | 32.1 | 67.9 | 30-70 | 55-90 | 75-100 | 90-100 |
| 5 | 600 micron | 205 | 526 | 52.6 | 47.4 | 15-34 | 35-59 | 60-79 | 80-100 |
| 6 | 300 micron | 203 | 729 | 72.9 | 27.1 | 5-20 | 8-30 | 12-40 | 15-50 |
| 7 | 150 micron | 191 | 920 | 92.0 | 8.0 | 0-10 | 0-10 | 0-10 | 0-15 |
| 8 | Pan | 80 | 1000 | 100.0 | 0.0 | --- | --- | --- | --- |

**Result :The tested Sample Conforms to Grading Zone II**

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## TEST RESULTS OF STEEL

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-12-31** **Date: 17-06-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 16-06-20 |
| **Sample Type** | : | Sunvik |
| **Reference to BIS codes** | : | IS 1786-2008, IS:1608-2005(RA 2011), IS 1599-2012. |
| **Date of test:** | : | 16-06-20 |

| SLNo | Identification of sample | Grade of the sample | Diameter of the steel bar | Weight of the sample | Yield stress | Tensile strength | Elongation | Bend test | Rebend test |
|---|---|---|---|---|---|---|---|---|---|
| | | | (mm) | (kg/m) | (N/mm2) | (N/mm2) | (%) | | |
| 1 | Sunvik | Fe500 | 8 | 0.391 | 512 | 652 | 20.0% | Satisfactory | Satisfactory |
| 2 | Sunvik | Fe500 | 10 | 0.616 | 528 | 672 | 20.0% | Satisfactory | Satisfactory |
| 3 | Sunvik | Fe500 | 12 | 0.888 | 544 | 668 | 20.0% | Satisfactory | Satisfactory |
| 4 | Sunvik | Fe500 | 16 | 1.581 | 572 | 674 | 19.0% | Satisfactory | Satisfactory |
| 5 | Sunvik | Fe500 | 20 | 2.476 | 584 | 693 | 19.0% | Satisfactory | Satisfactory |
| 6 | Sunvik | Fe500 | 25 | 3.472 | 597 | 712 | 18.0% | Satisfactory | Satisfactory |

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* The results obtained are satisfactory as per standard requirements.

Note:
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R KARTHIK RECHAN
Authorized Signatory
Quality Manager


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# TEST REPORT OF PHYSICAL REQUIREMENTS OF BRICKS

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-12-31** **Date: 02-07-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 26-06-20 |
| **Identification Mark on Brick** | : | Wire Cut Brick |
| **Reference to BIS codes** | : | IS 1077 : 1992(RA 2011) Common Burnt Clay Building Bricks-Specification<br>IS 3495 (Part 1 to 3) : 1992(RA 2011)<br>Method of Tests Burnt Clay Building Bricks<br>Part 1:Determination of Compressive Strength, (Cl 4.2.3)<br>Part 2:Determination of Water Absorption,(Cl 4.1.3)<br>Part 3: Determination of Efflorescence, (Cl 4) |
| **Date of test** | : | 26-06-20 |

## COMPRESSIVE STRENGTH

| Sl.No. | Length (mm) | Breadth (mm) | Area ($mm^2$) | Failure Load (KN) | Compressive strength of individual bricks ($N/mm^2$) | Acceptablity as per IS 1077:1992, Clause 7.1 |
|---|---|---|---|---|---|---|
| 1 | 228.13 | 109.98 | 25090 | 206.7 | 8.2 | The bricks shall have a minimum average compressive strength for various classes as given in Table 1 of IS 1077-1992. The compressive strength of any individual bricks shall not fall below the minimum compressive strength specified for the corresponding class of brick by more than 15%. |
| 2 | 228.98 | 108.62 | 24872 | 197.6 | 7.9 | |
| 3 | 231.01 | 107.99 | 24947 | 201.3 | 8.1 | |
| 4 | 230.11 | 107.54 | 24746 | 199.5 | 8.1 | |
| 5 | 228.16 | 106.98 | 24409 | 194.6 | 8.0 | |
| Average of 5 bricks | | | | | 8.1 | |

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# TEST REPORT OF CEMENT CONCRETE CUBES

| | | |
|---|---|---|
| Lab ID | : | CP-2020-12-12-31 Date: 22/07/2020 |
| Customer | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| Address | : | Yelahanka Sub Division, BBMP, Bangalore. |
| Project Name | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| Agency | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| Customer's Reference | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| Source of Sample | : | Sample supplied by Agency |
| Sample Condition | : | Satisfactory |
| Date of Receipt | : | 26-06-20 |
| Customer ID | : | Footing Concrete |
| Sample Type /Size | : | 150X150X150 mm |
| Sample grade/Age | : | M25 / 28 Days Compressive Strength |
| Reference to BIS codes | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5 |
| Date of test | : | 22/07/2020 |

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Footing Concrete | M25 | 24/06/2020 | 22/07/2020 | 151.53 X 149.67 X 151.27 | 22680 | 8.609 | 621.5 | 27.4 | 27.5 |
| 2 | Footing Concrete | M25 | 24/06/2020 | 22/07/2020 | 151.01 X 149.06 X 150.31 | 22511 | 8.661 | 589.7 | 26.2 | |
| 3 | Footing Concrete | M25 | 24/06/2020 | 22/07/2020 | 149.64 X 151.93 X 150.76 | 22735 | 8.081 | 654.5 | 28.8 | |

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* The results obtained are satisfactory as per standard requirements.

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# TEST REPORT OF CEMENT CONCRETE CUBES

Date: 04/07/2020

| | | |
|---|---|---|
| Lab ID | : | CP-2020-12-12-31 |
| Customer | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| Address | : | Yelahanka Sub Division, BBMP, Bangalore. |
| Project Name | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| Agency | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| Customer's Reference | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| Source of Sample | : | Sample supplied by Agency |
| Sample Condition | : | Satisfactory |
| Date of Receipt | : | 29-06-20 |
| Customer ID | : | Pedestal Concrete |
| Sample Type /Size | : | 150X150X150 mm |
| Sample grade/Age | : | M20 / 7 Days Compressive Strength |
| Reference to BIS codes | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5 |
| Date of test | : | 04/07/2020 |

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pedestal Concrete | M20 | 27/06/2020 | 04/07/2020 | 150.95 X 149.46 X 151.19 | 22560 | 8.788 | 409.5 | 18.2 | 18.5 |
| 2 | Pedestal Concrete | M20 | 27/06/2020 | 04/07/2020 | 149.13 X 149.81 X 149.22 | 22340 | 8.533 | 408.1 | 18.3 | |
| 3 | Pedestal Concrete | M20 | 27/06/2020 | 04/07/2020 | 151.17 X 149.13 X 151.36 | 22543 | 8.273 | 427.9 | 19.0 | |

* The results obtained are satisfactory as per standard requirements.

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Date
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Quality Manager

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# TEST REPORT OF CEMENT CONCRETE CUBES

Date: 09/07/2020

| | | |
|---|---|---|
| **Lab ID** | : | CP-2020-12-12-31 |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 04-07-20 |
| **Customer ID** | : | Plinth Beam Concrete |
| **Sample Type /Size** | : | 150X150X150 mm |
| **Sample grade/Age** | : | M20 / 7 Days Compressive Strength |
| **Reference to BIS codes** | : | IS. 516 - 1959 Methods of Tests for Strength of Concrete Cl.5 |
| **Date of test** | : | 09/07/2020 |

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm²) | Average Compressive Strength (N/mm²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Plinth Beam Concrete | M20 | 02/07/2020 | 09/07/2020 | 151.27 X 150.17 X 149.23 | 22716 | 8.788 | 426.0 | 18.8 | 18.6 |
| 2 | Plinth Beam Concrete | M20 | 02/07/2020 | 09/07/2020 | 151.85 X 150.15 X 151.89 | 22799 | 8.533 | 414.4 | 18.2 | |
| 3 | Plinth Beam Concrete | M20 | 02/07/2020 | 09/07/2020 | 151.10 X 151.90 X 150.30 | 22952 | 8.273 | 431.0 | 18.8 | |

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R KARTHIK RECHAN
Authorized Signatory
Quality Manager


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Format No: CP/TF/01

# TEST REPORT OF CEMENT CONCRETE CUBES

Date: 13/07/2020

| | | |
|---|---|---|
| **Lab ID** | : | CP-2020-12-12-31 |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 08-07-20 |
| **Customer ID** | : | Column Concrete |
| **Sample Type /Size** | : | 150X150X150 mm |
| **Sample grade/Age** | : | M20 / 7 Days Compressive Strength |
| **Reference to BIS codes** | : | IS. 516 - 1959 Methods of Tests for Strength of Concrete Cl.5 |
| **Date of test** | : | 13/07/2020 |

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm²) | Average Compressive Strength (N/mm²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Column Concrete | M20 | 06/07/2020 | 13/07/2020 | 150.90 X 151.00 X 151.60 | 22786 | 8.788 | 411.3 | 18.0 | 18.3 |
| 2 | Column Concrete | M20 | 06/07/2020 | 13/07/2020 | 150.85 X 149.96 X 150.61 | 22622 | 8.533 | 409.9 | 18.1 | |
| 3 | Column Concrete | M20 | 06/07/2020 | 13/07/2020 | 149.74 X 149.49 X 151.01 | 22384 | 8.273 | 419.3 | 18.7 | |

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# TEST REPORT OF CEMENT CONCRETE CUBES

Date: 21/07/2020

| | | |
|---|---|---|
| **Lab ID** | : | CP-2020-12-12-31 |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 16-07-20 |
| **Customer ID** | : | Lintel Concrete |
| **Sample Type /Size** | : | 150X150X150 mm |
| **Sample grade/Age** | : | M20 / 7 Days Compressive Strength |
| **Reference to BIS codes** | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5 |
| **Date of test** | : | 21/07/2020 |

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm²) | Average Compressive Strength (N/mm²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Lintel Concrete | M20 | 14/07/2020 | 21/07/2020 | 150.44 X 151.65 X 149.15 | 22814 | 8.788 | 414.9 | 18.2 | 18.4 |
| 2 | Lintel Concrete | M20 | 14/07/2020 | 21/07/2020 | 150.76 X 151.64 X 150.71 | 22861 | 8.533 | 420.1 | 18.4 | |
| 3 | Lintel Concrete | M20 | 14/07/2020 | 21/07/2020 | 150.68 X 151.51 X 150.71 | 22831 | 8.273 | 428.6 | 18.8 | |

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Quality Manager


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# TEST REPORT OF CEMENT CONCRETE CUBES

Date: 28/07/2020

| | | |
|---|---|---|
| **Lab ID** | : | CP-2020-12-12-31 |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 23-07-20 |
| **Customer ID** | : | Roof Concrete |
| **Sample Type /Size** | : | 150X150X150 mm |
| **Sample grade/Age** | : | M20 / 7 Days Compressive Strength |
| **Reference to BIS codes** | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5 |
| **Date of test** | : | 28/07/2020 |

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength ($N/mm^2$) | Average Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Roof Concrete | M20 | 21/07/2020 | 28/07/2020 | 151.19 X 151.80 X 149.02 | 22950 | 8.788 | 414.1 | 18.0 | 18.1 |
| 2 | Roof Concrete | M20 | 21/07/2020 | 28/07/2020 | 151.29 X 150.83 X 151.32 | 22819 | 8.533 | 412.5 | 18.1 | |
| 3 | Roof Concrete | M20 | 21/07/2020 | 28/07/2020 | 149.62 X 151.34 X 151.32 | 22643 | 8.273 | 412.3 | 18.2 | |

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Format No: CP/TF/2017

# TEST REPORT FOR SAND MASONRY MORTARS

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-12-31** **Date: 06-07-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 03-07-20 |
| **Sample Type** | : | Fine Aggregate, M.Sand for Mortar |
| **Reference to BIS codes** | : | IS 383 : 2016 (Specification for Coarse and fine Aggregates)<br>IS: 2116-1980 (RA-2007) (Specification for Sand for Masonry Mortars)<br>IS: 2386 :1963(Part - 1, 3) RA2012<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption |
| **Date of test** | : | 03-07-20 |
| **Total weight taken** | : | 1000 grams |

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| SLno | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS: 2116-1980 (RA-2007) |
|---|---|---|---|---|---|---|
| 1 | 4.75 mm | 0 | 0 | 0 | 100 | 100 |
| 2 | 2.36 mm | 85 | 85 | 8.5 | 91.5 | 90-100 |
| 3 | 1.18 mm | 200 | 285 | 28.5 | 71.5 | 70-100 |
| 4 | 600 micron | 146 | 431 | 43.1 | 56.9 | 40-100 |
| 5 | 300 micron | 116.5 | 547.5 | 54.8 | 45.3 | 5-70 |
| 6 | 150 micron | 412.5 | 960 | 96.0 | 4.0 | 0-15 |
| 7 | Pan | 40 | 1000 | 100.0 | 0.0 | 0 |



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Format No: CP/TF/2017

# TEST REPORT FOR PLASTER SAND

| | | |
|---|---|---|
| **Lab ID** | : | **CP-2020-12-12-31** **Date: 07-07-20** |
| **Customer** | : | Assistant Executive Engineer, Yelahanka Sub Division, BBMP, Bangalore. |
| **Address** | : | Yelahanka Sub Division, BBMP, Bangalore. |
| **Project Name** | : | Construction of Samudaya Bhavana Building at Kamakshamma Layout 1st Cross in Chowdeshwari Ward No -02 of Yelahanka Sub Division |
| **Agency** | : | Sri. Anjan Gowda P (Anjan Constructions), No:17, 1st B Main Road, B Sector, Yelahanka New Town Bangalore-560064 |
| **Customer's Reference** | : | BBMP/EE/YNK.D/EPMT-01/W.O/37/2020-21 |
| **Source of Sample** | : | Sample supplied by Agency |
| **Sample Condition** | : | Satisfactory |
| **Date of Receipt** | : | 03-07-20 |
| **Sample Type** | : | Plaster Sand |
| **Reference to BIS codes** | : | IS: 383 : 2016 (Specification for Coarse and fine Aggregates)<br>IS1542:1992 (Sand for Plaster - Specification)<br>IS: 2386 :1963(Part - 1, 3) RA2012<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption |
| **Date of test** | : | 03-07-20 |
| **Total weight taken** | : | 1000 grams |

| SLno | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS 1542:1992 |
|---|---|---|---|---|---|---|
| 1 | 10 mm | 0 | 0 | 0 | 100 | 100 |
| 2 | 4.75 mm | 35 | 35 | 3.5 | 96.5 | 95-100 |
| 3 | 2.36 mm | 15 | 50 | 5 | 95 | 95-100 |
| 4 | 1.18 mm | 50 | 100 | 10 | 90 | 90-100 |
| 5 | 600 micron | 100 | 200 | 20 | 80 | 80-100 |
| 6 | 300 micron | 215 | 415 | 41.5 | 58.5 | 20-65 |
| 7 | 150 micron | 500 | 915 | 91.5 | 8.5 | 0-15 |
| 8 | Pan | 85 | 1000 | 100 | 0 | --- |

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## TEST REPORT OF FINE AGGREGATE

**Lab ID** : **CP-2020-12-12-31** **Date: 07-07-20**

**PHYSICAL PROPERTIES**

| Sl.no | Tests | Result | Requirements as per IS 383:2016 |
|---|---|---|---|
| 1 | Water Absorption(%) | 1.8 | – |
| 2 | Specific Gravity | 2.56 | – |
| 3 | Material finer than 75 micron(%) | 8.5 | Uncrushed fine Aggregate Max 3%, Crushed Fine aggregate Max 15%, Mixed Fine aggregate Max 12%, Manufactured Fine aggregate Max 10% |

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**FOR CIVIL Pro.**

**R KARTHIK RECHAN**
Authorized Signatory
**Quality Manager**


****End of Report****

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